UNIVERSITI TEKNOLOGI MARA

MONITORING AND ANALYSIS PART OF RIVER BANK USING UNMANNED AERIAL VEHICLE (UAV) AT TERUSAN BESAR, JITRA

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Thesis submitted in fulfillment
of the requirements for the degree of
Bachelor Science of Geomatics (Hons)

Faculty of Architecture, Planning and Surveying

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AUTHOR'S DECLARATION

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

The unmanned aerial vehicle today not just as hobby but for mapping with the photogrammetry concept, combining aerial photo and aerial mapping. The ability of UAV is to capture the aerial image with the information of the ground control point that can be produce in elevation model. The purpose of this thesis was to produce the Digital Surface Model and Digital Terrain Model of the study area with the aim to apply photogrammetry concept in aerial mapping using unmanned aerial vehicle for the river bank in Digital Surface Model and Digital Terrain Model at Kampong Lubuk Batu, Kedah. The objective of this thesis consist with three which is producing DSM and DTM, generating river bank profile and to evaluate of the two source of data. The methodology consist with the data was achieved by processing using the software. Flight control algorithms to guide a vehicle through waypoint based flight paths and loiter about a point were implemented using direction fields. The result will show the changes of the river bank between the current and previous image captured data in 2015

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